

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
1 July 2004 (01.07.2004)

PCT

(10) International Publication Number
WO 2004/055729 A1

(51) International Patent Classification⁷: G06T 5/00, 7/00

(21) International Application Number:

PCT/IB2003/005756

(22) International Filing Date: 5 December 2003 (05.12.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

60/433,418 13 December 2002 (13.12.2002) US

(71) Applicant (for all designated States except US): KONINKLIJKE PHILIPS ELECTRONICS N.V. [NL/NL]; Groenewoudseweg 1, NL-5621 BA Eindhoven (NL).

(72) Inventors; and

(75) Inventors/Applicants (for US only): HERMAN, Stephen [US/US]; P.O. Box 3001, Briarcliff Manor, NY 10510-8001 (US). BELLERS, Erwin [NL/US]; P.O. Box 3001, Briarcliff Manor, NY 10510-8001 (US).

(74) Common Representative: KONINKLIJKE PHILIPS ELECTRONICS N.V.; c/o GROSS, Russell, P.O. Box 3001, Briarcliff Manor, NY 10510-8001 (US).

(81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (regional): ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declaration under Rule 4.17:

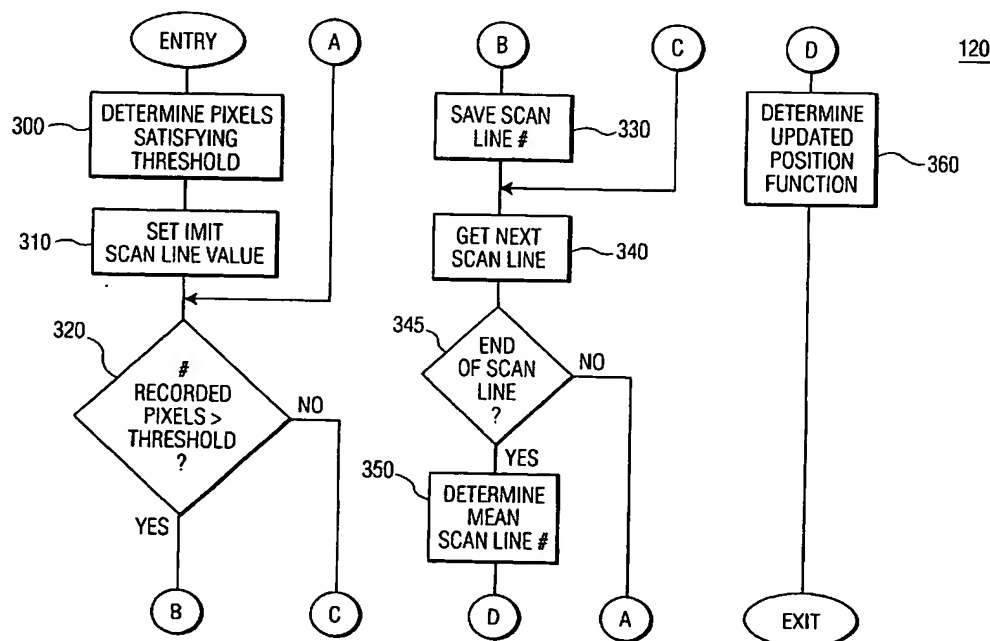
— as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for all designations

Published:

— with international search report

[Continued on next page]

(54) Title: ADAPTIVE SEGMENTATION OF TELEVISION IMAGES



(57) Abstract: A method (100) and system (600) for adaptively segmenting pixel elements in an image frame is disclosed. The method comprises the steps of segmenting pixel elements into at least one first region based on a selection criteria (110), refining the selection criteria (150) based on information associated with each of the pixel elements within an associated first region and segmenting (160) the image pixel elements into at least one second region based on said refined selection criteria (150).



For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.